



E-Commerce Sales Analytics: Insights & Recommendations



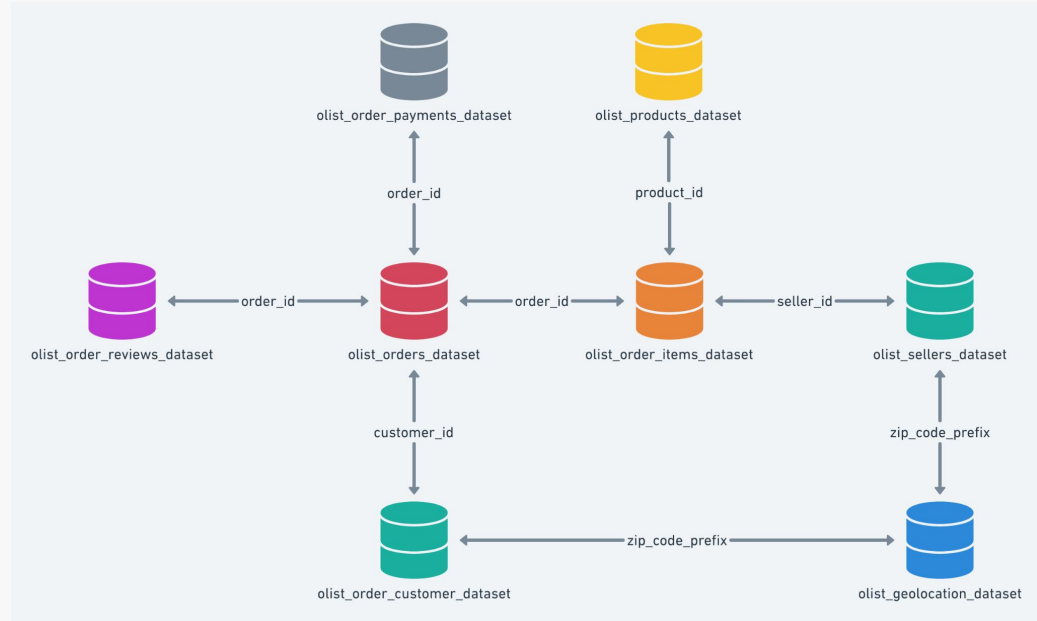
Presented by Sophie Guo





Overview of the Dataset

- **OLIST.COM**
Data Sourced from Brazil's Leading Department Store
- **100,000 Orders**
Spanning 2016–2018
- **1,550,922 Rows**
Nine Connected Datasets



Source: [Kaggle](#)





Project Motivations

O1 - Define the demand

Understand **consumer preferences** by identifying the top five product categories.

O2 - Sales Analysis


Analyze **purchase volume** and **revenue trends** throughout the year.

O3 - Supply Density

Locate **marketplaces** where sellers offer products across various categories.

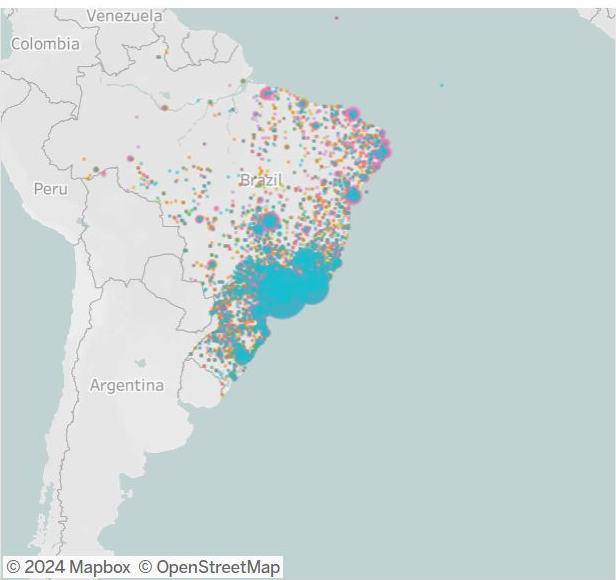
O4 - Seller Assessment

Evaluate seller performance based on **ratings** and **delivery times**.



Top 5 Most Purchased Products: Consumer & Seller Info

Consumer Locations & Expenditure



Top 5 Product Categories

- ☒ (All)
- ☐ bed_bath_table
- ☐ computers_accessories
- ☐ furniture_decor
- ☐ health_beauty
- ☐ sports_leisure

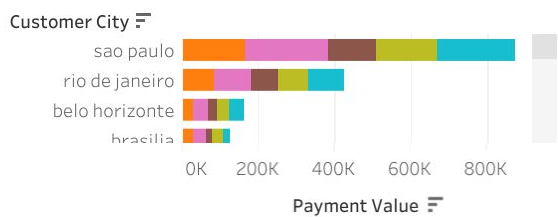
Quarter

- ☒ (All)
- ☐ Q1
- ☐ Q2
- ☐ Q3
- ☐ Q4

Top 5 Product Categories

- ☒ bed_bath_table
- ☒ health_beauty
- ☒ sports_leisure
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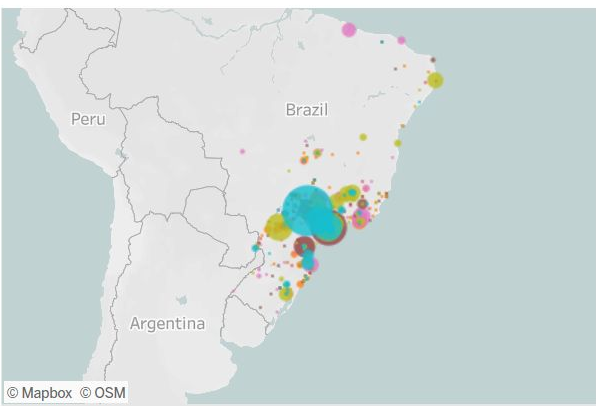
Expenditure Breakdown



Total Amount Spent

- ☐ 16
- ☐ 50,000
- ☐ 100,000
- ☐ 150,000
- ☐ 214,940

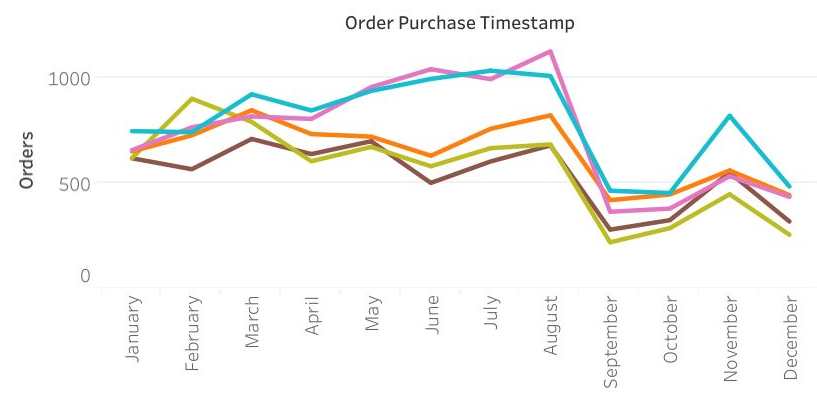
Seller Locations & Revenue



Total Revenue

- ☐ 26
- ☐ 200,000
- ☐ 400,000
- ☐ 635,706

Orders over Time



Define the Demand

Top 5 **Product Categories** (in order volume):

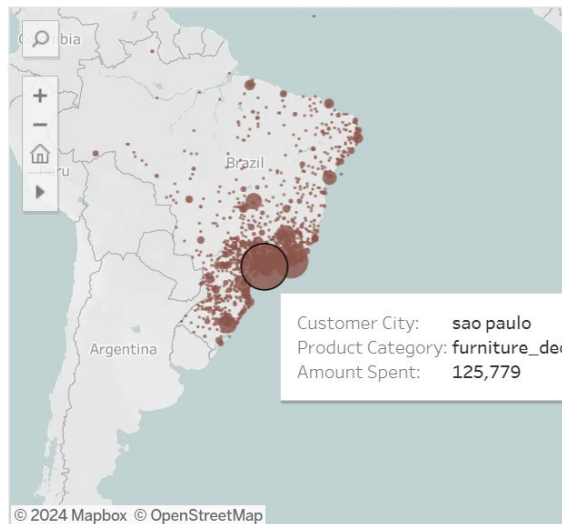
1. Bed, bath, and table
2. Computers and tech accessories
3. Furniture and decor
4. Health and beauty
5. Sports and leisure

Top 5 **Consumer Cities** (in amount spent):

1. São Paulo
2. Rio de Janeiro
3. Belo Horizonte
4. Brasília
5. Curitiba



Consumer Locations & Expenditure



Top 5 Product Categories

- ☐ (All)
- ☐ bed_bath_table
- ☐ computers_accessories
- ☒ furniture_decor
- ☐ health_beauty
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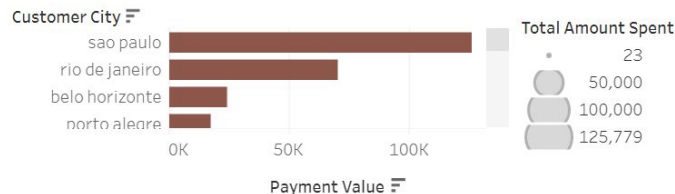
Quarter

- ☒ (All)
- ☐ Q1
- ☐ Q2
- ☐ Q3
- ☐ Q4

Top 5 Product Categories

- ☒ furniture_decor

Expenditure Breakdown





Sales Analysis



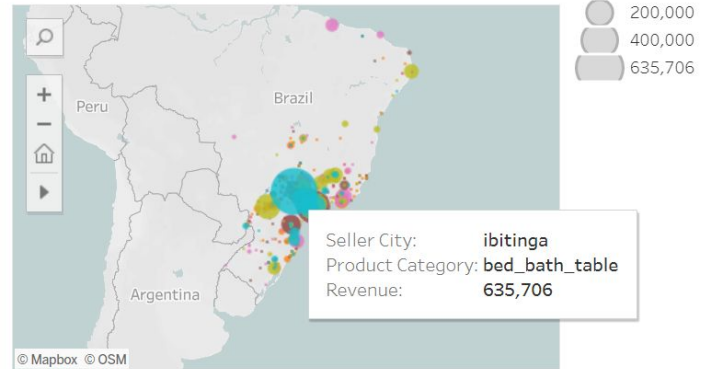
Dip in Sales in September

This pattern is true for each for the popular product categories.

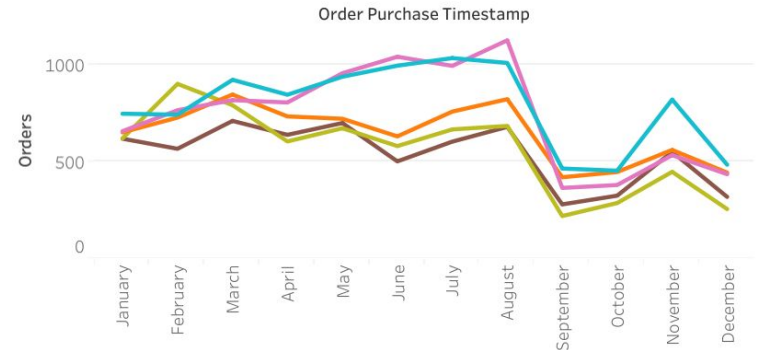
Highest Seller Revenue

R\$635,706 for bed, bath, and table products in Ibitinga.

Seller Locations & Revenue

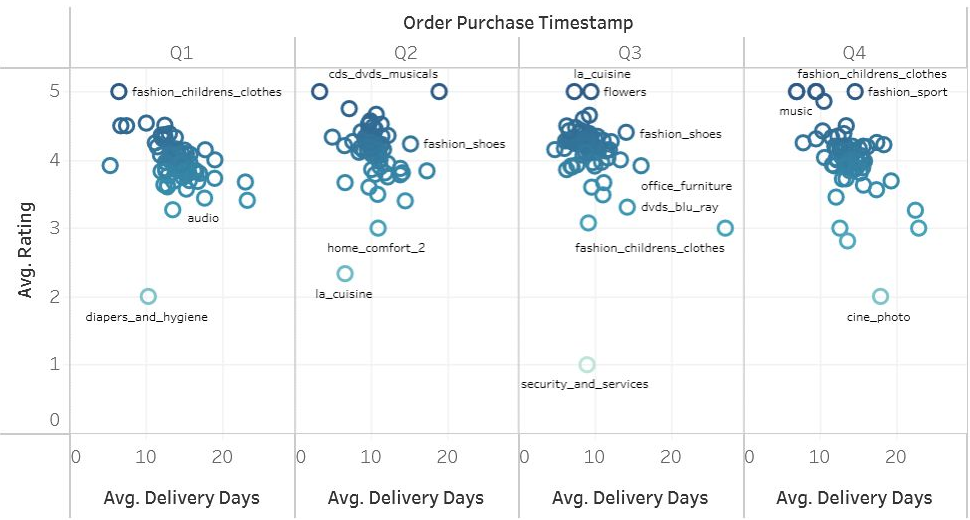


Orders over Time

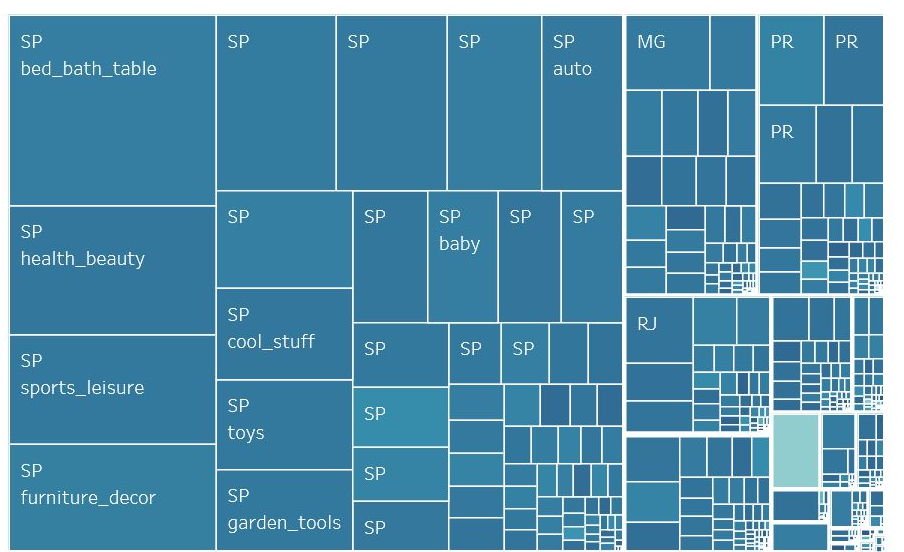


Evaluating Performance by Seller State

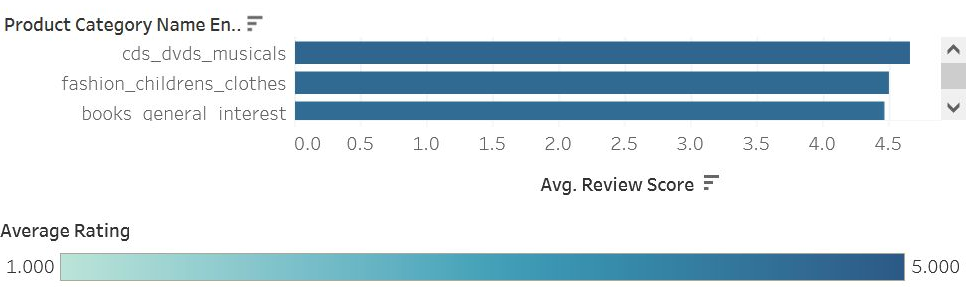
Rating and Delivery Performance, by Quarter



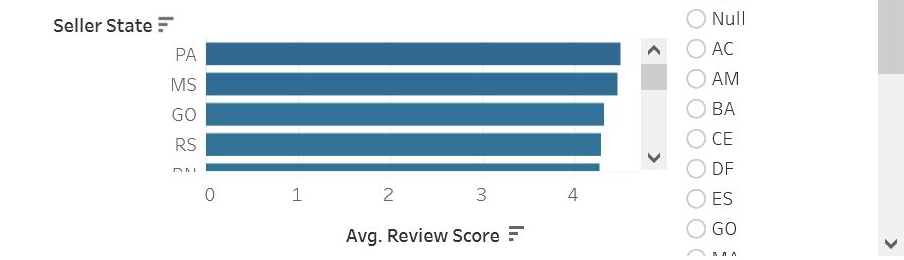
Product Breakdown: Sales & Ratings



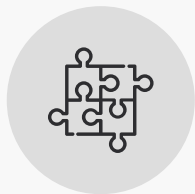
Overall Product Ratings



Overall State Ratings



Supply Density



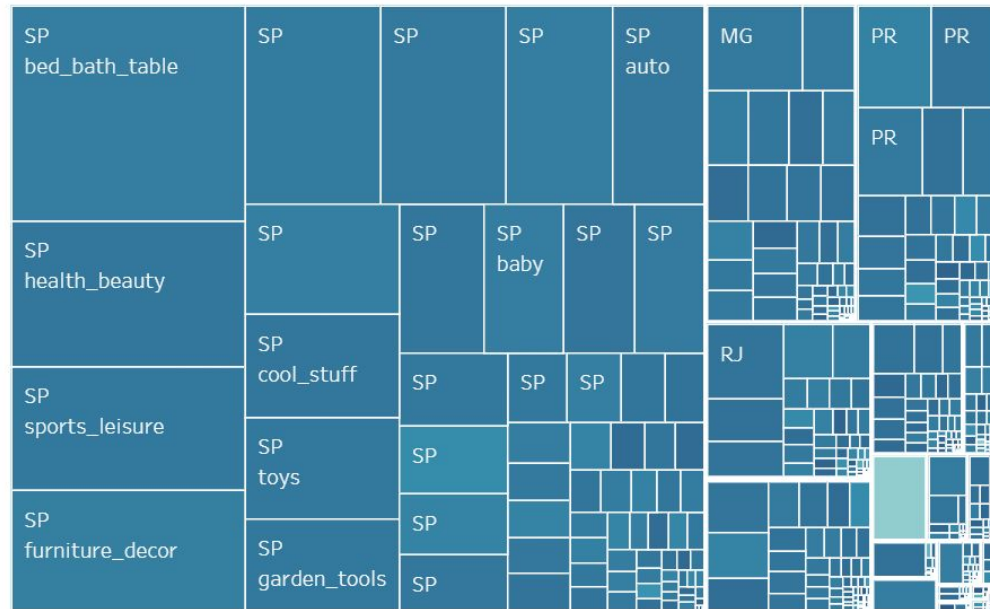
Largest Marketplace

73,328 orders coming out of São Paulo (SP) state.

Smallest Marketplace

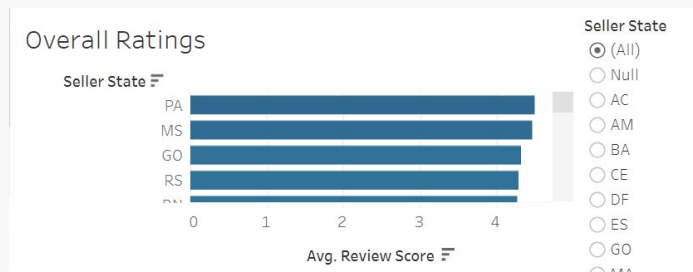
1 order coming out of Acre (AC) state.

Product Breakdown: Sales & Ratings





Seller Assessment



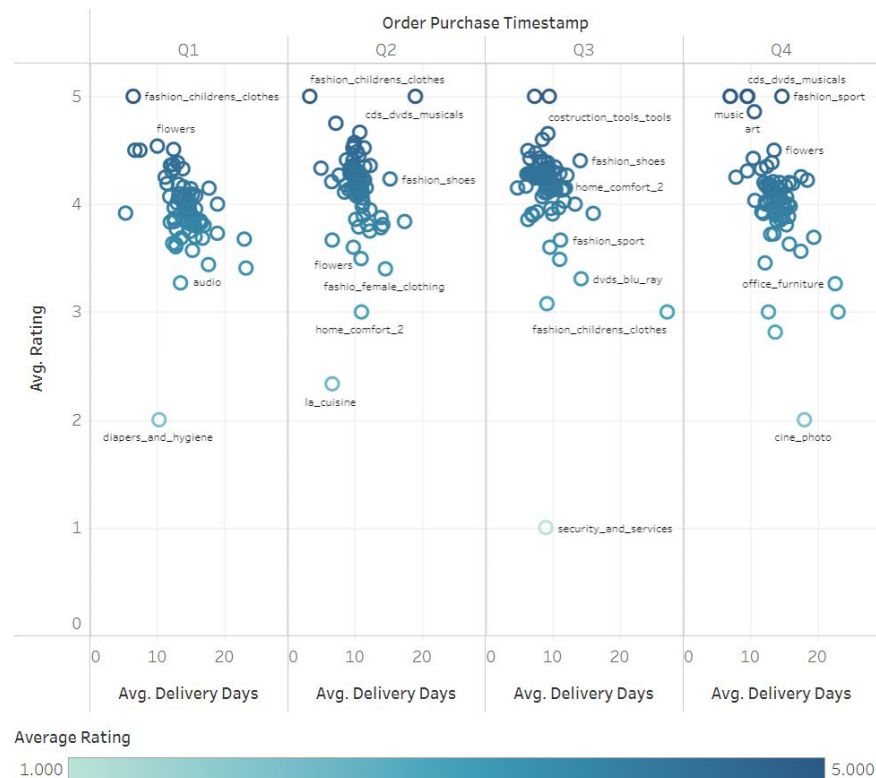
Delivery v. Ratings

In general, as delivery days increase, ratings decrease.

Highest Rated State

Pará (PA) has an average rating of 4.5.

Rating and Delivery Performance, by Quarter





Seller Assessment, cont.

Highest Rated Category

CDs, DVDs, and musicals has an average rating of 4.667.

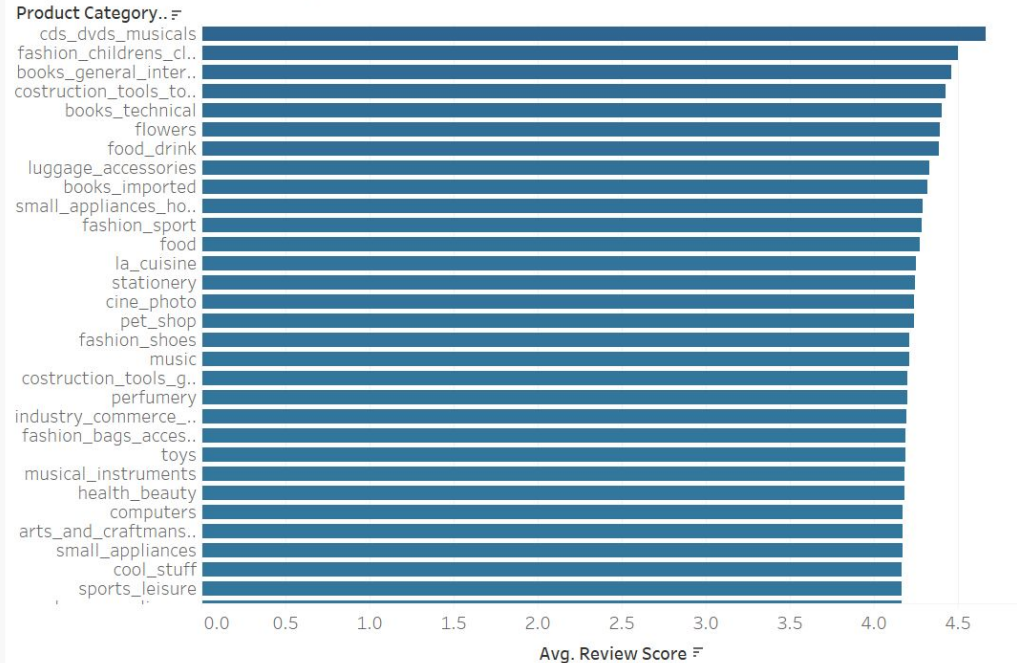
Lowest Rated Category

Security and services has an average rating of 2.5.

Variations by State

Certain states should aim to improve in their weak spots.

Overall Product Ratings

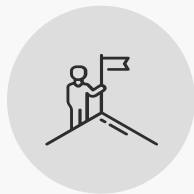


Moving Forward



Understand your perspective

Investigation should be tailored based on your interests. Consider focusing on areas such as geographic location, consumer behavior, seller metrics, timing, and specialized product categories.



Introduce new variables

Identify variables that are not included in the datasets but may be of interest. Consider implementing further data collection.



Expand the dataset

As the dataset covers sales from 2016 to 2018, regular updates can provide a more comprehensive understanding of ongoing trends and patterns.





THANKS!

Do you have any questions?

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